

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	346	210/330	USPAT	OR	OFF	2006/11/30 07:01
S2	3581	filter adj (phase filtration)	USPAT	OR	OFF	2006/12/04 09:35
S3	2353	filter near5 phase and filtration	USPAT	OR	ON	2006/11/30 07:02
S4	2353	S3 and phase	USPAT	OR	ON	2006/11/30 07:17
S5	266	S3 and phase near separation	USPAT	OR	ON	2006/12/01 10:19
S6	13311	filter and phase near separation	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:38
S7	13311	S6 and phase near5 separation	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:16
S8	13311	S6 and (phase separation)	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:16
S9	266	S3 and phase near separation	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:16
S10	2353	S3 and phase	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:25
S11	548	S10 and phase near5 separation	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:26
S12	126	stack adj filter near5 element	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 13:16
S13	3	S12 and film near5 element	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:31
S14	0	S12 adj phase near5 separation	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:34
S15	1	S11 and central near5 perforation	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:35
S16	1	S15 and phase near5 separation	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:36
S17	23303	filter and film near5 element	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:36

## EAST Search History

S18	1935	S17 and stack	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 10:03
S19	48	S18 and parallel near5 stack	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:40
S20	92	S18 and phase near5 separation	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 07:40
S21	23303	filter and film near5 element	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 10:03
S22	1935	S21 and stack	US-PGPUB; USPAT; EPO	OR	ON	2006/11/30 10:03
S23	157	S22 and film adj element	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:26
S24	0	"634875".pn.	USPAT	OR	OFF	2006/11/30 10:16
S25	0	"634875".pn.	USPAT	OR	OFF	2006/11/30 10:17
S26	0	"562043".pn.	USPAT	OR	OFF	2006/11/30 10:29
S27	643	210/486	US-PGPUB; USPAT; EPO	OR	OFF	2006/11/30 15:09
S28	643	210/486	US-PGPUB; USPAT; EPO	OR	OFF	2006/11/30 15:10
S29	4	S28 and parallel near5 stack	US-PGPUB; USPAT; EPO	OR	OFF	2006/11/30 15:14
S30	25	S28 and stacks	US-PGPUB; USPAT; EPO	OR	OFF	2006/11/30 15:12
S31	22	S30 and parallel	US-PGPUB; USPAT; EPO	OR	OFF	2006/11/30 15:13
S32	0	S30 and fillet	US-PGPUB; USPAT; EPO	OR	OFF	2006/11/30 15:13
S33	0	S31 and fillet	US-PGPUB; USPAT; EPO	OR	OFF	2006/11/30 15:13
S34	4	S28 and parallel near5 stack	US-PGPUB; USPAT; EPO	OR	OFF	2006/11/30 15:14

## EAST Search History

S35	24271	filter and film near5 elements	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:31
S36	5	S35 and parallel adj stacks	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:20
S37	11295	S35 and matrix	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:32
S38	22	S37 and stack near5 parallel	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:21
S39	0	S37 and stack near5 fillet	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:21
S40	0	S37 and stack near5 fillets	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:21
S41	0	S37 and connected adj fillets	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:22
S42	22	S37 and fillets	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:22
S43	22	S37 and fillet	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:22
S44	275	S35 and film adj stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:23
S45	22	S37 and fillet	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:29
S46	866	S37 and film adj element	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:35
S47	56	S46 and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:30
S48	33	S47 and arrangement	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:29
S49	6	S37 and film adj ring	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:32

## EAST Search History

S50	139	S37 and ceramic near5 sheet	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:35
S51	4430	filter and ceramic near5 film	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:37
S52	1788	S51 and metal near5 (film stack)	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:37
S53	694	S52 and matrix	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:31
S54	189649	(film element)and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 10:24
S55	38455	S54 and filter	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:45
S56	2238	S54 and phase near5 separation	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:45
S57	161	S56 and film near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 07:46
S58	346	210/330	USPAT	OR	OFF	2006/12/01 07:57
S59	49	S58 and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:11
S60	0	S58 and fillet	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:11
S61	15	S58 and tie	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:12
S62	0	S58 and tie near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:12
S63	11	S58 and stack near5 arrangement	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:13
S64	2	S58 and parallel near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:15
S65	0	S58 and stack near5 square	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:15

## EAST Search History

S66	14	S58 and base near5 plate	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:33
S67	1042	210/488	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:41
S68	12	S67 and film near5 element	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:33
S69	263	S67 and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:36
S70	4	S67 and fillet	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:36
S71	15	S69 and cover adj plate	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:38
S72	34	S69 and matrix	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:38
S73	338	S67 and channel	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:39
S74	202	S73 and parallel	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:39
S75	3	S73 and parallel adj arrangement	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:39
S76	130	S73 and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:39
S77	8	S67 and connected near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:30
S78	643	210/486	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:24
S79	2	S78 and film near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:51
S80	1	S79 and connected near5 stacks	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:46

## EAST Search History

S81	302	210/77	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:47
S82	0	S81 and film near5 stacks	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:47
S83	0	S81 and film near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:47
S84	6	S81 and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:47
S85	0	S84 and filter near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:48
S86	2	S84 and filter	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:48
S87	1	S79 and filter adj cake	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:49
S88	5	S78 and central near5 perforations	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:50
S89	1	S88 and film near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:50
S90	2	S88 and rings	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:50
S91	2	S79 and arranged	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:51
S92	300	210/49	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:51
S93	0	S92 and film near5 elements	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:52
S94	0	S92 and film near5 element	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 08:52
S95	1498	210/502.1	USPAT	OR	OFF	2006/12/01 09:19
S96	0	210/502.01	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/12/01 09:19

## EAST Search History

S97	1651	210/502.1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/12/01 09:20
S98	235	S97 and filter near5 element	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:24
S99	10	S97 and film near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:21
S10 0	0	S99 and connected	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:21
S10 1	6	S99 and parallel	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:21
S10 2	2	S99 and cake	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:22
S10 3	10	S99 and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:22
S10 4	0	S98 and multiple adj stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:24
S10 5	0	S98 and multiple near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:24
S10 6	4	S78 and multiple near5 stacks	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:25
S10 7	3	S106 and parallel	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:26
S10 8	0	S98 and rectangular near5 arrangement	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:27
S10 9	0	S98 and rectangular adj arrangement	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:27
S11 0	32	S98 and rectangular	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:28
S11 1	0	S88 and rectangular adj arrangement	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:29

## EAST Search History

S11 2	3	S88 and arrangement	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:29
S11 3	1	S78 and neighboring near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:30
S11 4	2	S37 and neighboring near5 stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:31
S11 5	1	S56 and square near5 net	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:50
S11 6	0	"33707pn."	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:51
S11 7	1	"3370713".pn.	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:53
S11 8	0	S45 and tied adj together	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:52
S11 9	1	S45 and connected adj together	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:53
S12 0	0	S117 and connected adj together	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:53
S12 1	0	S117 and film adj stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:53
S12 2	0	S117 and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:53
S12 3	0	S117 and film adj element	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:54
S12 4	0	S117 and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 09:54
S12 5	2353	filter near5 phase and filtration	USPAT	OR	ON	2006/12/01 10:19
S12 6	266	S125 and phase near separation	USPAT	OR	ON	2006/12/01 10:19
S12 7	2	S126 and grid near5 net	USPAT	OR	ON	2006/12/01 10:20



## EAST Search History

S12 8	13	S126 and grid	USPAT	OR	ON	2006/12/01 10:27
S12 9	25	S126 and net	USPAT	OR	ON	2006/12/01 10:21
S13 0	13311	filter and phase near separation	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:22
S13 1	13	S130 and film adj stack	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:23
S13 2	189649	(film element)and stack	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 10:24
S13 3	0	S132 and stack adj alignment	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 10:25
S13 4	0	S131 and stack adj alignment	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/01 10:25
S13 5	2353	S125 and phase	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:25
S13 6	0	S135 and alignment	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:25
S13 7	0	"L18" and alignment	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:25
S13 8	7211	S23and film adj element	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:27
S13 9	1	S138 and alignment	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:26
S14 0	1	S138 and alignment	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:27
S14 1	0	S138 and square adj alignment	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:27
S14 2	0	(film stack) adj alignment	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 10:27
S14 3	0	"L2" and stack adj alignment	USPAT	OR	ON	2006/12/01 10:28

## EAST Search History

S14 4	1	"3471017".pn.	USPAT	OR	OFF	2006/12/01 13:09
S14 5	1	"3645399".pn.	USPAT	OR	OFF	2006/12/01 13:10
S14 6	0	"36545399".pn.	USPAT	OR	OFF	2006/12/01 13:10
S14 7	1	"3645399".pn.	USPAT	OR	OFF	2006/12/01 13:10
S14 8	126	stack adj filter near5 element	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:22
S14 9	0	S148 and square adj grid	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 13:16
S15 0	0	S148 and grid adj net	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 13:22
S15 1	0	S148 and grid near5 net	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 13:22
S15 2	9	S148 and (grid net)	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 13:23
S15 3	35	S148 and alignment	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 13:24
S15 4	0	S148 and alignment near5 fillet	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 13:25
S15 5	0	S148 and connected near5 fillet	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 13:25
S15 6	89	S148 and connected	US-PGPUB; USPAT; EPO	OR	ON	2006/12/01 13:25
S15 8	0	S157 and stack adj film	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:23
S15 9	5	S157 and film adj element	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:24
S16 0	0	S159 and rectangular adj net	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:24

## EAST Search History

S16 1	23303	filter and film near5 element	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:35
S16 2	1935	S161 and stack	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:35
S16 3	45	S162 and phase adj separation	USPAT	OR	OFF	2006/12/04 09:37
S16 4	39	S163 and liquid	USPAT	OR	OFF	2006/12/04 09:37
S16 5	13311	filter and phase near separation	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:38
S16 6	41	S165 and liquid adj filter	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:39
S16 7	25	S165 and film adj elements	US-PGPUB; USPAT; EPO	OR	ON	2006/12/04 09:39